



MAIMO.056DC1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Diab, et al. ) Group Art Unit 3736  
Appl. No. : 09/547,588 )  
Filed : April 11, 2000 )  
For : IMPROVED SIGNAL )  
PROCESSING APPARATUS )  
AND METHOD )  
Examiner : Eric Frank Winakur )

RECEIVED

NOV 13 2002

TECHNOLOGY CENTER R3700

AMENDMENT IN RESPONSE TO THE OCTOBER 3, 2002 OFFICE ACTION

United States Patent and Trademark Office  
P.O. Box 2327  
Arlington, VA 22202

Dear Sir:

In response to the Office Action dated October 3, 2002. Applicants respectfully submit the following amendments and comments in connection with the above-captioned application.

IN THE CLAIMS:

Please cancel Claim 1, without prejudice.

Please add new claims 31-52 as follows:

- Sub D15  
C1
31. A physiological monitor for monitoring a pulse rate of a living being, said monitor comprising a signal processor configured to:
- transform a time-domain plethysmograph dataset into a spectral-domain dataset;
  - identify a plurality of spectral peaks in said spectral domain waveform; and
  - sort said plurality of spectral peaks into one or more spectral peaks corresponding to a fundamental frequency and one or more harmonics of said fundamental frequency, and estimate a pulse rate from said fundamental frequency and said one or more harmonics.
32. The physiological monitor of Claim 31, wherein said signal processor is configured to sort said spectral peaks according to one or more rules.